

ABSTRACT

In one embodiment, a reactive filtration method includes continuously regenerating a reactive filter media while simultaneously filtering contaminants from fluid flowing through the filter media. In one embodiment, regenerating the reactive filter media comprises mixing metal granules with the filter media and agitating the mixture. In another embodiment, regenerating the reactive filter media comprises introducing a metal in the fluid flowing through the filter media and agitating the filter media. In one embodiment, a method for removing phosphorus, arsenic or a heavy metal from water includes introducing a metal salt reagent into the water at a molar ratio of 5:1 to 200:1 to the phosphorous or the arsenic in the water and passing the water through a bed of moving sand.